

December 3, 2019

Alan Sundquist
CDW Consultants, Inc.
6 Huron Drive
Natick, MA 01760

Project Location: Beaver St., Waltham, MA
Client Job Number:
Project Number: 1552
Laboratory Work Order Number: 19K1404

Enclosed are results of analyses for samples received by the laboratory on November 22, 2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Michelle M. Koch
Project Manager

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CDW Consultants, Inc.
6 Huron Drive
Natick, MA 01760
ATTN: Alan Sundquist

REPORT DATE: 12/3/2019

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 1552

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 19K1404

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Beaver St., Waltham, MA

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
HB-16	19K1404-01	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-17	19K1404-02	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-19	19K1404-03	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-20	19K1404-04	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-22	19K1404-05	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-23	19K1404-06	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-24	19K1404-07	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-25	19K1404-08	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-26	19K1404-09	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	
HB-27	19K1404-10	Soil		SM 2540G SW-846 6010D SW-846 7471B SW-846 8270D-E	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.



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SW-846 6010D

Qualifications:**MS-07**

Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:**Antimony**

19K1404-01[HB-16], B247118-MS1

SW-846 7471B

Qualifications:**R-05**

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:**Mercury**

B247114-BSD1

SW-846 8270D-E

Qualifications:**L-04**

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Benzoic Acid**

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], 19K1404-09[HB-26], 19K1404-10[HB-27], B246869-BLK1, B246869-BS1, B246869-BSD1

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol**

19K1404-09[HB-26], 19K1404-10[HB-27]

Benzidine

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:**Benzidine**

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], 19K1404-09[HB-26], 19K1404-10[HB-27], B246869-BLK1, B246869-BS1, B246869-BSD1

Hexachlorocyclopentadiene

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

Pentachlorophenol

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**2,4-Dinitrophenol**

19K1404-09[HB-26], 19K1404-10[HB-27]

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:**4-chloroaniline**

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1



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V-35

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

2-Nitroaniline

19K1404-09[HB-26], 19K1404-10[HB-27]

Benzidine

19K1404-01[HB-16], 19K1404-02[HB-17], 19K1404-03[HB-19], 19K1404-04[HB-20], 19K1404-05[HB-22], 19K1404-06[HB-23], 19K1404-07[HB-24], 19K1404-08[HB-25], B246869-BLK1, B246869-BS1, B246869-BSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Lisa A. Worthington". The signature is fluid and cursive, with a long horizontal stroke at the end.

Lisa A. Worthington

Technical Representative

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Acetophenone	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Aniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(a)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(a)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(b)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(g,h,i)perylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzo(k)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Benzoic Acid	ND	1.8	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-chloroethoxy)methane	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-chloroethyl)ether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-chloroisopropyl)ether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Bromophenylphenylether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Butylbenzylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Chloronaphthalene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Chlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Chlorophenylphenylether	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Chrysene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Dibenzofuran	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Di-n-butylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2-Dichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,3-Dichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,4-Dichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dichlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Diethylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dimethylphenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Dimethylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4,6-Dinitro-2-methylphenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4-Dinitrotoluene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,6-Dinitrotoluene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Di-n-octylphthalate	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Fluorene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Hexachlorobutadiene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Hexachlorocyclopentadiene	ND	0.61	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Hexachloroethane	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Isophorone	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Methylphenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
3/4-Methylphenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Nitroaniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
3-Nitroaniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Nitroaniline	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Nitrobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2-Nitrophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
N-Nitrosodimethylamine	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
N-Nitrosodi-n-propylamine	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pentachloronitrobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pentachlorophenol	ND	0.61	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Phenanthrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Phenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Pyridine	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
1,2,4-Trichlorobenzene	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4,5-Trichlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
2,4,6-Trichlorophenol	ND	0.61	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:17	KLB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	68.6	30-130						11/27/19 22:17	
Phenol-d6	68.9	30-130						11/27/19 22:17	
Nitrobenzene-d5	66.4	30-130						11/27/19 22:17	
2-Fluorobiphenyl	69.6	30-130						11/27/19 22:17	
2,4,6-Tribromophenol	73.3	30-130						11/27/19 22:17	
p-Terphenyl-d14	92.5	30-130						11/27/19 22:17	

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1	MS-07	SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Arsenic	8.1	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Barium	64	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Beryllium	0.49	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Cadmium	ND	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Chromium	14	0.60	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Lead	87	0.90	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Mercury	0.11	0.044	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:47	CJV
Nickel	9.8	0.60	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Selenium	ND	6.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Silver	ND	0.60	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Thallium	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Vanadium	37	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:20	MJH
Zinc	70	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 16:41	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-16

Sampled: 11/20/2019 14:00

Sample ID: 19K1404-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	55.8		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Acetophenone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Aniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benidine	ND	1.1	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(a)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(a)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(b)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(g,h,i)perylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzo(k)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Benzoic Acid	ND	1.7	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-chloroethoxy)methane	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-chloroethyl)ether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-chloroisopropyl)ether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Bromophenylphenylether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3-tylbenzylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Chloroaniline	ND	1.1	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Chloronaphthalene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Chlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Chlorophenylphenylether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Chrysene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Dibenzofuran	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Di-n-butylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,3-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,4-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Diethylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dimethylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Dimethylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4,6-Dinitro-2-methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4-Dinitrotoluene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,6-Dinitrotoluene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Di-n-octylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Fluorene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Hexachlorobutadiene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Hexachlorocyclopentadiene	ND	0.59	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Hexachloroethane	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Isophorone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3/4-Methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
3-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Nitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2-Nitrophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
N-Nitrosodimethylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
N-Nitrosodi-n-propylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pentachloronitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pentachlorophenol	ND	0.59	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Phenanthrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Phenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Pyridine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
1,2,4-Trichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4,5-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
2,4,6-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 22:40	KLB
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
2-Fluorophenol	69.6		30-130				11/27/19 22:40		
Phenol-d6	69.9		30-130				11/27/19 22:40		
Nitrobenzene-d5	66.8		30-130				11/27/19 22:40		
2-Fluorobiphenyl	67.8		30-130				11/27/19 22:40		
2,4,6-Tribromophenol	74.3		30-130				11/27/19 22:40		
p-Terphenyl-d14	87.2		30-130				11/27/19 22:40		



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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Arsenic	6.8	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Barium	56	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Beryllium	0.45	0.29	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Cadmium	0.29	0.29	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Chromium	13	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Lead	93	0.87	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Mercury	0.12	0.046	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:48	CJV
Nickel	9.4	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Selenium	ND	5.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Silver	ND	0.58	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Thallium	ND	2.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Vanadium	37	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:26	MJH
Zinc	60	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 16:46	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-17

Sampled: 11/20/2019 15:00

Sample ID: 19K1404-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	56.6		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Acenaphthylene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Acetophenone	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Aniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Anthracene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzidine	ND	0.98	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(a)anthracene	0.51	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(a)pyrene	0.60	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(b)fluoranthene	0.81	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(g,h,i)perylene	0.43	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzo(k)fluoranthene	0.31	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Benzoic Acid	ND	1.5	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-chloroethoxy)methane	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-chloroethyl)ether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-chloroisopropyl)ether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Bromophenylphenylether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Butylbenzylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Carbazole	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Chloroaniline	ND	0.98	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Chloro-3-methylphenol	ND	0.98	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Chloronaphthalene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Chlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Chlorophenylphenylether	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Chrysene	0.66	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Dibenz(a,h)anthracene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Dibenzofuran	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Di-n-butylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,2-Dichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,3-Dichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,4-Dichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
3,3-Dichlorobenzidine	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dichlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Diethylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dimethylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Dimethylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4,6-Dinitro-2-methylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dinitrophenol	ND	0.98	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4-Dinitrotoluene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,6-Dinitrotoluene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Di-n-octylphthalate	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4,4'-Diphenylhydrazine/Azobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Fluoranthene	1.1	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Fluorene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Hexachlorobutadiene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Hexachlorocyclopentadiene	ND	0.50	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Hexachloroethane	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Indeno(1,2,3-cd)pyrene	0.50	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Isophorone	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1-Methylnaphthalene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Methylnaphthalene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Methylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
3/4-Methylphenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Naphthalene	ND	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Nitroaniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
3-Nitroaniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Nitroaniline	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Nitrobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2-Nitrophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
4-Nitrophenol	ND	0.98	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
N-Nitrosodimethylamine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
N-Nitrosodi-n-propylamine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pentachloronitrobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pentachlorophenol	ND	0.50	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Phenanthrene	0.54	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Phenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pyrene	1.3	0.25	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Pyridine	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
1,2,4-Trichlorobenzene	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4,5-Trichlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
2,4,6-Trichlorophenol	ND	0.50	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:03	KLB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	66.5	30-130						11/27/19 23:03	
Phenol-d6	68.7	30-130						11/27/19 23:03	
Nitrobenzene-d5	66.6	30-130						11/27/19 23:03	
2-Fluorobiphenyl	68.9	30-130						11/27/19 23:03	
2,4,6-Tribromophenol	72.8	30-130						11/27/19 23:03	
p-Terphenyl-d14	87.2	30-130						11/27/19 23:03	

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Arsenic	6.9	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Barium	40	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Beryllium	0.31	0.25	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Cadmium	0.57	0.25	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Chromium	26	0.49	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Lead	350	0.74	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Mercury	0.11	0.038	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:50	CJV
Nickel	16	0.49	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Selenium	ND	4.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Silver	ND	0.49	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Thallium	ND	2.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Vanadium	35	0.99	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:33	MJH
Zinc	110	0.99	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 16:51	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-19

Sampled: 11/21/2019 08:30

Sample ID: 19K1404-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	67.0		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Acenaphthylene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Acetophenone	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Aniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Anthracene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzidine	ND	1.4	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(a)anthracene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(a)pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(b)fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(g,h,i)perylene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzo(k)fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Benzoic Acid	ND	2.1	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-chloroethoxy)methane	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-chloroethyl)ether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-chloroisopropyl)ether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Bromophenylphenylether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-tert-butylbenzylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Carbazole	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Chloroaniline	ND	1.4	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Chloro-3-methylphenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Chloronaphthalene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Chlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Chlorophenylphenylether	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Chrysene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Dibenz(a,h)anthracene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Dibenzofuran	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Di-n-butylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,2-Dichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,3-Dichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,4-Dichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
3,3-Dichlorobenzidine	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dichlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Diethylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dimethylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Dimethylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4,6-Dinitro-2-methylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dinitrophenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4-Dinitrotoluene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,6-Dinitrotoluene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Di-n-octylphthalate	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4,4'-Diphenylhydrazine/Azobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Fluoranthene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Fluorene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB

Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Hexachlorobutadiene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Hexachlorocyclopentadiene	ND	0.72	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Hexachloroethane	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Indeno(1,2,3-cd)pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Isophorone	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1-Methylnaphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Methylnaphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Methylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
3/4-Methylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Naphthalene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Nitroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
3-Nitroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Nitroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Nitrobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2-Nitrophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
4-Nitrophenol	ND	1.4	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
N-Nitrosodimethylamine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
N-Nitrosodi-n-propylamine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pentachloronitrobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pentachlorophenol	ND	0.72	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Phenanthrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Phenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pyrene	ND	0.36	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Pyridine	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
1,2,4-Trichlorobenzene	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4,5-Trichlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
2,4,6-Trichlorophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:26	KLB
Surrogates		% Recovery	Recovery Limits		Flag/Qual				
2-Fluorophenol		63.5	30-130					11/27/19 23:26	
Phenol-d6		68.9	30-130					11/27/19 23:26	
Nitrobenzene-d5		67.4	30-130					11/27/19 23:26	
2-Fluorobiphenyl		71.3	30-130					11/27/19 23:26	
2,4,6-Tribromophenol		76.6	30-130					11/27/19 23:26	
p-Terphenyl-d14		96.6	30-130					11/27/19 23:26	

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Arsenic	7.3	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Barium	110	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Beryllium	0.66	0.35	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Cadmium	0.42	0.35	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Chromium	14	0.70	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Lead	71	1.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Mercury	0.10	0.055	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:56	CJV
Nickel	11	0.70	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Selenium	ND	7.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Silver	ND	0.70	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Thallium	ND	3.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Vanadium	38	1.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 3:39	MJH
Zinc	63	1.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 16:57	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-20

Sampled: 11/21/2019 09:00

Sample ID: 19K1404-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	46.3		% Wt	1		SM 2540G	11/25/19	11/26/19 10:38	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Acetophenone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Aniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(a)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(a)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(b)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Benzoic Acid	ND	1.9	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-chloroethoxy)methane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-chloroethyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-chloroisopropyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Bromophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Butylbenzylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Carbazole	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Chloronaphthalene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Chlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Chlorophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Chrysene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Dibenzofuran	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Di-n-butylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,3-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,4-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
3,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Diethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dimethylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Dimethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4,6-Dinitro-2-methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,6-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Di-n-octylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Fluorene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Hexachlorobutadiene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Hexachlorocyclopentadiene	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Hexachloroethane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Isophorone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
3/4-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Naphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
3-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Nitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2-Nitrophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
N-Nitrosodimethylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
N-Nitrosodi-n-propylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pentachloronitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pentachlorophenol	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Phenanthrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Phenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
Pyridine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
1,2,4-Trichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4,5-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB
2,4,6-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:49	KLB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	69.7	30-130	11/27/19 23:49
Phenol-d6	72.7	30-130	11/27/19 23:49
Nitrobenzene-d5	72.5	30-130	11/27/19 23:49
2-Fluorobiphenyl	76.8	30-130	11/27/19 23:49
2,4,6-Tribromophenol	81.4	30-130	11/27/19 23:49
p-Terphenyl-d14	105	30-130	11/27/19 23:49

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Arsenic	5.4	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Barium	70	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Beryllium	0.81	0.32	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Cadmium	0.41	0.32	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Chromium	13	0.63	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Lead	45	0.95	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Mercury	0.11	0.045	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:57	CJV
Nickel	10	0.63	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Selenium	ND	6.3	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Silver	ND	0.63	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Thallium	ND	3.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Vanadium	41	1.3	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:02	MJH
Zinc	91	1.3	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:14	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-22

Sampled: 11/21/2019 10:30

Sample ID: 19K1404-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	53.7		% Wt	1		SM 2540G	11/25/19	11/26/19 10:39	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Acenaphthylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Acetophenone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Aniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzidine	ND	1.2	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(a)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(a)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(b)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(g,h,i)perylene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzo(k)fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Benzoic Acid	ND	1.9	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-chloroethoxy)methane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-chloroethyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-chloroisopropyl)ether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Bromophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-tert-butylphenylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Carbazole	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Chloroaniline	ND	1.2	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Chloro-3-methylphenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Chloronaphthalene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Chlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Chlorophenylphenylether	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Chrysene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Dibenz(a,h)anthracene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Dibenzofuran	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Di-n-butylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,3-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,4-Dichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
3,3-Dichlorobenzidine	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Diethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dimethylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Dimethylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4,6-Dinitro-2-methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dinitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,6-Dinitrotoluene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Di-n-octylphthalate	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Fluoranthene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Fluorene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Hexachlorobutadiene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Hexachlorocyclopentadiene	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Hexachloroethane	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Indeno(1,2,3-cd)pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Isophorone	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Methylnaphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
3/4-Methylphenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Naphthalene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
3-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Nitroaniline	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Nitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2-Nitrophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
4-Nitrophenol	ND	1.2	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
N-Nitrosodimethylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
N-Nitrosodi-n-propylamine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pentachloronitrobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pentachlorophenol	ND	0.63	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Phenanthrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Phenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pyrene	ND	0.32	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Pyridine	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
1,2,4-Trichlorobenzene	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4,5-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
2,4,6-Trichlorophenol	ND	0.63	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:11	KLB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	67.3	30-130						11/28/19 0:11	
Phenol-d6	68.6	30-130						11/28/19 0:11	
Nitrobenzene-d5	69.7	30-130						11/28/19 0:11	
2-Fluorobiphenyl	69.9	30-130						11/28/19 0:11	
2,4,6-Tribromophenol	73.9	30-130						11/28/19 0:11	
p-Terphenyl-d14	94.6	30-130						11/28/19 0:11	



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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Arsenic	4.9	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Barium	70	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Beryllium	0.81	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Cadmium	0.45	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Chromium	13	0.61	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Lead	44	0.91	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Mercury	0.11	0.047	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 9:59	CJV
Nickel	10	0.61	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Selenium	ND	6.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Silver	ND	0.61	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Thallium	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Vanadium	41	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:08	MJH
Zinc	90	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:19	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-23

Sampled: 11/21/2019 11:30

Sample ID: 19K1404-06

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	53.5		% Wt	1		SM 2540G	11/25/19	11/26/19 10:39	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Acenaphthylene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Acetophenone	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Aniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Anthracene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzidine	ND	0.91	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(a)anthracene	0.51	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(a)pyrene	0.53	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(b)fluoranthene	0.75	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(g,h,i)perylene	0.32	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzo(k)fluoranthene	0.29	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Benzoic Acid	ND	1.4	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-chloroethoxy)methane	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-chloroethyl)ether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-chloroisopropyl)ether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Bis(2-Ethylhexyl)phthalate	3.5	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Bromophenylphenylether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3-utylbenzylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Carbazole	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Chloroaniline	ND	0.91	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Chloro-3-methylphenol	ND	0.91	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Chloronaphthalene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Chlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Chlorophenylphenylether	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Chrysene	0.63	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Dibenz(a,h)anthracene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Dibenzofuran	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Di-n-butylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2-Dichlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,3-Dichlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,4-Dichlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3,3-Dichlorobenzidine	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dichlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Diethylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dimethylphenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Dimethylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4,6-Dinitro-2-methylphenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dinitrophenol	ND	0.91	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4-Dinitrotoluene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,6-Dinitrotoluene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Di-n-octylphthalate	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2-Diphenylhydrazine/Azobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Fluoranthene	0.97	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Fluorene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Hexachlorobutadiene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Hexachlorocyclopentadiene	ND	0.47	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Hexachloroethane	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Indeno(1,2,3-cd)pyrene	0.38	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Isophorone	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1-Methylnaphthalene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Methylnaphthalene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Methylphenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3/4-Methylphenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Naphthalene	ND	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Nitroaniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
3-Nitroaniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Nitroaniline	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Nitrobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2-Nitrophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
4-Nitrophenol	ND	0.91	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
N-Nitrosodimethylamine	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
n-Nitrosodiphenylamine/Diphenylamine	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
N-Nitrosodi-n-propylamine	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pentachloronitrobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pentachlorophenol	ND	0.47	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Phenanthrene	0.55	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Phenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pyrene	1.2	0.23	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
Pyridine	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
1,2,4-Trichlorobenzene	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4,5-Trichlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB
2,4,6-Trichlorophenol	ND	0.47	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:34	KLB

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	63.5	30-130	11/28/19 0:34
Phenol-d6	66.4	30-130	11/28/19 0:34
Nitrobenzene-d5	63.2	30-130	11/28/19 0:34
2-Fluorobiphenyl	66.2	30-130	11/28/19 0:34
2,4,6-Tribromophenol	75.6	30-130	11/28/19 0:34
p-Terphenyl-d14	85.6	30-130	11/28/19 0:34

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Arsenic	5.6	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Barium	40	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Beryllium	0.31	0.24	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Cadmium	0.45	0.24	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Chromium	27	0.48	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Lead	290	0.72	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Mercury	0.095	0.034	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:00	CJV
Nickel	14	0.48	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Selenium	ND	4.8	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Silver	ND	0.48	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Thallium	ND	2.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Vanadium	31	0.95	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:15	MJH
Zinc	100	0.95	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:24	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-24

Sampled: 11/21/2019 12:30

Sample ID: 19K1404-07

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	70.8		% Wt	1		SM 2540G	11/25/19	11/26/19 10:39	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Sample ID: 19K1404-08

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Acenaphthylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Acetophenone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Aniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzidine	ND	1.1	mg/Kg dry	1	V-04, V-05, V-35	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzo(a)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzo(a)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzo(b)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzo(g,h,i)perylene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzo(k)fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Benzoic Acid	ND	1.7	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Bis(2-chloroethoxy)methane	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Bis(2-chloroethyl)ether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Bis(2-chloroisopropyl)ether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Bis(2-Ethylhexyl)phthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Bromophenylphenylether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Butylbenzylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Carbazole	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Chloroaniline	ND	1.1	mg/Kg dry	1	V-34	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Chloronaphthalene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Chlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Chlorophenylphenylether	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Chrysene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Dibenz(a,h)anthracene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Dibenzofuran	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Di-n-butylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,2-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,3-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,4-Dichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
3,3-Dichlorobenzidine	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4-Dichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Diethylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4-Dimethylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Dimethylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4,6-Dinitro-2-methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4-Dinitrotoluene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,6-Dinitrotoluene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Di-n-octylphthalate	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
,2-Diphenylhydrazine/Azobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Fluoranthene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Fluorene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Sample ID: 19K1404-08

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Hexachlorobutadiene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Hexachlorocyclopentadiene	ND	0.59	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Hexachloroethane	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Indeno(1,2,3-cd)pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Isophorone	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Methylnaphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
3/4-Methylphenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Naphthalene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
3-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Nitroaniline	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Nitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2-Nitrophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
N-Nitrosodimethylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
N-Nitrosodiphenylamine/Diphenylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
N-Nitrosodi-n-propylamine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pentachloronitrobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pentachlorophenol	ND	0.59	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Phenanthrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Phenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pyrene	ND	0.30	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Pyridine	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,2,4,5-Tetrachlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
1,2,4-Trichlorobenzene	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4,5-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
2,4,6-Trichlorophenol	ND	0.59	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:56	KLB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2-Fluorophenol	50.8	30-130						11/28/19 0:56	
Phenol-d6	52.3	30-130						11/28/19 0:56	
Nitrobenzene-d5	52.2	30-130						11/28/19 0:56	
2-Fluorobiphenyl	53.5	30-130						11/28/19 0:56	
2,4,6-Tribromophenol	56.9	30-130						11/28/19 0:56	
p-Terphenyl-d14	67.9	30-130						11/28/19 0:56	

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Sample ID: 19K1404-08

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Arsenic	7.4	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Barium	85	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Beryllium	0.67	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Cadmium	0.32	0.30	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Chromium	14	0.59	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Lead	73	0.89	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Mercury	0.21	0.042	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:02	CJV
Nickel	11	0.59	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Selenium	ND	5.9	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Silver	ND	0.59	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Thallium	ND	3.0	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Vanadium	45	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:21	MJH
Zinc	53	1.2	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:30	TBC



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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-25

Sampled: 11/21/2019 13:00

Sample ID: 19K1404-08

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	56.8		% Wt	1		SM 2540G	11/25/19	11/26/19 10:46	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Acenaphthylene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Acetophenone	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Aniline	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzidine	ND	1.1	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(a)anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(a)pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(b)fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(g,h,i)perylene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzo(k)fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Benzoic Acid	ND	1.6	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-chloroethoxy)methane	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-chloroethyl)ether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-chloroisopropyl)ether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Bromophenylphenylether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Butylbenzylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Carbazole	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Chloroaniline	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Chloronaphthalene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Chlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Chlorophenylphenylether	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Chrysene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Dibenz(a,h)anthracene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Dibenzofuran	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Di-n-butylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,2-Dichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,3-Dichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,4-Dichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
3,3-Dichlorobenzidine	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4-Dichlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Diethylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4-Dimethylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Dimethylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4,6-Dinitro-2-methylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1	V-20, V-04	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4-Dinitrotoluene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,6-Dinitrotoluene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Di-n-octylphthalate	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Diphenylhydrazine/Azobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Fluoranthene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Fluorene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Hexachlorobutadiene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Hexachlorocyclopentadiene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Hexachloroethane	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Indeno(1,2,3-cd)pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Isophorone	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1-Methylnaphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Methylnaphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Methylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
3/4-Methylphenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Naphthalene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Nitroaniline	ND	0.55	mg/Kg dry	1	V-35	SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
3-Nitroaniline	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Nitroaniline	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Nitrobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2-Nitrophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
N-Nitrosodimethylamine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
N-Nitrosodi-n-propylamine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pentachloronitrobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pentachlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Phenanthrene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Phenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pyrene	ND	0.27	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
Pyridine	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
1,2,4-Trichlorobenzene	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4,5-Trichlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL
2,4,6-Trichlorophenol	ND	0.55	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/27/19 23:58	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	67.7	30-130	11/27/19 23:58
Phenol-d6	69.9	30-130	11/27/19 23:58
Nitrobenzene-d5	68.8	30-130	11/27/19 23:58
2-Fluorobiphenyl	72.0	30-130	11/27/19 23:58
2,4,6-Tribromophenol	76.6	30-130	11/27/19 23:58
p-Terphenyl-d14	76.1	30-130	11/27/19 23:58

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Arsenic	4.7	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Barium	62	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Beryllium	0.76	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Cadmium	0.39	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Chromium	12	0.54	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Lead	42	0.81	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Mercury	0.11	0.041	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:04	CJV
Nickel	8.9	0.54	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Selenium	ND	5.4	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Silver	ND	0.54	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Thallium	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Vanadium	37	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:27	MJH
Zinc	79	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:35	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-26

Sampled: 11/21/2019 13:30

Sample ID: 19K1404-09

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	60.7		% Wt	1		SM 2540G	11/25/19	11/26/19 10:47	adb

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Acenaphthylene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Acetophenone	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Aniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzidine	ND	1.1	mg/Kg dry	1	V-05	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(a)anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(a)pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(b)fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(g,h,i)perylene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzo(k)fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Benzoic Acid	ND	1.6	mg/Kg dry	1	L-04	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-chloroethoxy)methane	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-chloroethyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-chloroisopropyl)ether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Bromophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Butylbenzylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Carbazole	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Chloroaniline	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Chloro-3-methylphenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Chloronaphthalene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Chlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Chlorophenylphenylether	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Chrysene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Dibenz(a,h)anthracene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Dibenzofuran	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Di-n-butylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,2-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,3-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,4-Dichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
3,3-Dichlorobenzidine	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Diethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dimethylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Dimethylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4,6-Dinitro-2-methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dinitrophenol	ND	1.1	mg/Kg dry	1	V-04, V-20	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,6-Dinitrotoluene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Di-n-octylphthalate	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,2-Diphenylhydrazine/Azobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Fluoranthene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Fluorene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Hexachlorobutadiene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Hexachlorocyclopentadiene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Hexachloroethane	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Indeno(1,2,3-cd)pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Isophorone	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1-Methylnaphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Methylnaphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
3/4-Methylphenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Naphthalene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Nitroaniline	ND	0.56	mg/Kg dry	1	V-35	SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
3-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Nitroaniline	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Nitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2-Nitrophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
4-Nitrophenol	ND	1.1	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
N-Nitrosodimethylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
N-Nitrosodi-n-propylamine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Pentachloronitrobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Pentachlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Phenanthrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Phenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Pyrene	ND	0.28	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
Pyridine	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
1,2,4-Trichlorobenzene	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4,5-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL
2,4,6-Trichlorophenol	ND	0.56	mg/Kg dry	1		SW-846 8270D-E	11/24/19	11/28/19 0:22	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	54.4	30-130	11/28/19 0:22
Phenol-d6	57.9	30-130	11/28/19 0:22
Nitrobenzene-d5	56.2	30-130	11/28/19 0:22
2-Fluorobiphenyl	59.8	30-130	11/28/19 0:22
2,4,6-Tribromophenol	64.1	30-130	11/28/19 0:22
p-Terphenyl-d14	64.4	30-130	11/28/19 0:22

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Antimony	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Arsenic	4.9	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Barium	66	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Beryllium	0.83	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Cadmium	0.40	0.27	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Chromium	12	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Lead	42	0.82	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Mercury	0.12	0.039	mg/Kg dry	1		SW-846 7471B	11/26/19	11/27/19 10:05	CJV
Nickel	9.3	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Selenium	ND	5.5	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Silver	ND	0.55	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Thallium	ND	2.7	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Vanadium	38	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 4:34	MJH
Zinc	84	1.1	mg/Kg dry	1		SW-846 6010D	11/26/19	11/27/19 17:40	TBC

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Project Location: Beaver St., Waltham, MA

Sample Description:

Work Order: 19K1404

Date Received: 11/22/2019

Field Sample #: HB-27

Sampled: 11/21/2019 14:30

Sample ID: 19K1404-10

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	59.9		% Wt	1		SM 2540G	11/25/19	11/26/19 10:47	adb

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
19K1404-01 [HB-16]	B246947	11/25/19
19K1404-02 [HB-17]	B246947	11/25/19
19K1404-03 [HB-19]	B246947	11/25/19
19K1404-04 [HB-20]	B246947	11/25/19
19K1404-05 [HB-22]	B246947	11/25/19
19K1404-06 [HB-23]	B246947	11/25/19
19K1404-07 [HB-24]	B246947	11/25/19
19K1404-08 [HB-25]	B246947	11/25/19
19K1404-09 [HB-26]	B246947	11/25/19
19K1404-10 [HB-27]	B246947	11/25/19

Prep Method: SW-846 3050B-SW-846 6010D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19K1404-01 [HB-16]	B247118	1.49	50.0	11/26/19
19K1404-02 [HB-17]	B247118	1.52	50.0	11/26/19
19K1404-03 [HB-19]	B247118	1.51	50.0	11/26/19
19K1404-04 [HB-20]	B247118	1.55	50.0	11/26/19
19K1404-05 [HB-22]	B247118	1.47	50.0	11/26/19
19K1404-06 [HB-23]	B247118	1.54	50.0	11/26/19
19K1404-07 [HB-24]	B247118	1.48	50.0	11/26/19
19K1404-08 [HB-25]	B247118	1.48	50.0	11/26/19
19K1404-09 [HB-26]	B247118	1.52	50.0	11/26/19
19K1404-10 [HB-27]	B247118	1.53	50.0	11/26/19

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19K1404-01 [HB-16]	B247114	0.617	50.0	11/26/19
19K1404-02 [HB-17]	B247114	0.582	50.0	11/26/19
19K1404-03 [HB-19]	B247114	0.588	50.0	11/26/19
19K1404-04 [HB-20]	B247114	0.586	50.0	11/26/19
19K1404-05 [HB-22]	B247114	0.623	50.0	11/26/19
19K1404-06 [HB-23]	B247114	0.598	50.0	11/26/19
19K1404-07 [HB-24]	B247114	0.619	50.0	11/26/19
19K1404-08 [HB-25]	B247114	0.629	50.0	11/26/19
19K1404-09 [HB-26]	B247114	0.606	50.0	11/26/19
19K1404-10 [HB-27]	B247114	0.639	50.0	11/26/19

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19K1404-01 [HB-16]	B246869	30.1	1.00	11/24/19
19K1404-02 [HB-17]	B246869	30.5	1.00	11/24/19
19K1404-03 [HB-19]	B246869	30.3	1.00	11/24/19
19K1404-04 [HB-20]	B246869	30.4	1.00	11/24/19
19K1404-05 [HB-22]	B246869	30.1	1.00	11/24/19
19K1404-06 [HB-23]	B246869	30.1	1.00	11/24/19
19K1404-07 [HB-24]	B246869	30.7	1.00	11/24/19
19K1404-08 [HB-25]	B246869	30.4	1.00	11/24/19
19K1404-09 [HB-26]	B246869	30.7	1.00	11/24/19

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Sample Extraction Data

Prep Method: SW-846 3546-SW-846 8270D-E

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
19K1404-10 [HB-27]	B246869	30.6	1.00	11/24/19

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
Blank (B246869-BLK1)				Prepared: 11/24/19 Analyzed: 11/27/19						
Accenaphthene	ND	0.17	mg/Kg wet							
Accenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Aniline	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzidine	ND	0.66	mg/Kg wet							V-04, V-05, V-35
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Benzoic Acid	ND	1.0	mg/Kg wet							L-04
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							V-34
2-Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.34	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
1,2-Diphenylhydrazine/Azobenzene	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							V-05
Hexachloroethane	ND	0.34	mg/Kg wet							
Benzo(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
1-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
Blank (B246869-BLK1) Prepared: 11/24/19 Analyzed: 11/27/19										
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							
3-Nitroaniline	ND	0.34	mg/Kg wet							
4-Nitroaniline	ND	0.34	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
N-Nitrosodimethylamine	ND	0.34	mg/Kg wet							
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachloronitrobenzene	ND	0.34	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							V-05
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Pyridine	ND	0.34	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.51		mg/Kg wet	6.67		82.7	30-130			
Surrogate: Phenol-d6	5.60		mg/Kg wet	6.67		84.1	30-130			
Surrogate: Nitrobenzene-d5	2.58		mg/Kg wet	3.33		77.5	30-130			
Surrogate: 2-Fluorobiphenyl	2.76		mg/Kg wet	3.33		82.9	30-130			
Surrogate: 2,4,6-Tribromophenol	5.84		mg/Kg wet	6.67		87.5	30-130			
Surrogate: p-Terphenyl-d14	3.14		mg/Kg wet	3.33		94.3	30-130			
LCS (B246869-BS1) Prepared: 11/24/19 Analyzed: 11/27/19										
Acenaphthene	1.09	0.17	mg/Kg wet	1.67		65.7	40-140			
Acenaphthylene	1.17	0.17	mg/Kg wet	1.67		70.0	40-140			
Acetophenone	1.11	0.34	mg/Kg wet	1.67		66.6	40-140			
Aniline	0.809	0.34	mg/Kg wet	1.67		48.5	10-140			†
Anthracene	1.25	0.17	mg/Kg wet	1.67		75.0	40-140			
Benzidine	1.85	0.66	mg/Kg wet	1.67		111	40-140			V-04, V-05, V-35
Benzo(a)anthracene	1.20	0.17	mg/Kg wet	1.67		72.2	40-140			
Benzo(a)pyrene	1.17	0.17	mg/Kg wet	1.67		70.2	40-140			
Benzo(b)fluoranthene	1.18	0.17	mg/Kg wet	1.67		71.0	40-140			
Benzo(g,h,i)perylene	1.15	0.17	mg/Kg wet	1.67		68.8	40-140			
Benzo(k)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.3	40-140			
Benzoic Acid	0.179	1.0	mg/Kg wet	1.67		10.7 *	30-130			L-04
Bis(2-chloroethoxy)methane	1.11	0.34	mg/Kg wet	1.67		66.6	40-140			
Bis(2-chloroethyl)ether	1.04	0.34	mg/Kg wet	1.67		62.4	40-140			
Bis(2-chloroisopropyl)ether	1.13	0.34	mg/Kg wet	1.67		67.6	40-140			
Bis(2-Ethylhexyl)phthalate	1.24	0.34	mg/Kg wet	1.67		74.2	40-140			
4-Bromophenylphenylether	1.17	0.34	mg/Kg wet	1.67		70.3	40-140			
Butylbenzylphthalate	1.23	0.34	mg/Kg wet	1.67		73.6	40-140			
rbazole	1.20	0.17	mg/Kg wet	1.67		72.3	40-140			
Chloroaniline	0.893	0.66	mg/Kg wet	1.67		53.6	10-140			V-34 †
4-Chloro-3-methylphenol	1.23	0.66	mg/Kg wet	1.67		73.7	30-130			
2-Chloronaphthalene	0.986	0.34	mg/Kg wet	1.67		59.2	40-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
LCS (B246869-BS1)					Prepared: 11/24/19 Analyzed: 11/27/19					
2-Chlorophenol	1.11	0.34	mg/Kg wet	1.67		66.4	30-130			
4-Chlorophenylphenylether	1.16	0.34	mg/Kg wet	1.67		69.4	40-140			
Chrysene	1.19	0.17	mg/Kg wet	1.67		71.2	40-140			
Dibenz(a,h)anthracene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140			
Dibenzofuran	1.20	0.34	mg/Kg wet	1.67		71.8	40-140			
Di-n-butylphthalate	1.24	0.34	mg/Kg wet	1.67		74.2	40-140			
1,2-Dichlorobenzene	1.02	0.34	mg/Kg wet	1.67		61.1	40-140			
1,3-Dichlorobenzene	0.991	0.34	mg/Kg wet	1.67		59.5	40-140			
1,4-Dichlorobenzene	0.995	0.34	mg/Kg wet	1.67		59.7	40-140			
3,3-Dichlorobenzidine	0.946	0.17	mg/Kg wet	1.67		56.8	20-140			†
2,4-Dichlorophenol	1.13	0.34	mg/Kg wet	1.67		67.6	30-130			
Diethylphthalate	1.16	0.34	mg/Kg wet	1.67		69.8	40-140			
2,4-Dimethylphenol	1.01	0.34	mg/Kg wet	1.67		60.8	30-130			
Dimethylphthalate	1.16	0.34	mg/Kg wet	1.67		69.7	40-140			
4,6-Dinitro-2-methylphenol	1.09	0.34	mg/Kg wet	1.67		65.5	30-130			
2,4-Dinitrophenol	0.601	0.66	mg/Kg wet	1.67		36.1	30-130			
2,4-Dinitrotoluene	1.30	0.34	mg/Kg wet	1.67		78.1	40-140			
2,6-Dinitrotoluene	1.32	0.34	mg/Kg wet	1.67		79.4	40-140			
Di-n-octylphthalate	1.29	0.34	mg/Kg wet	1.67		77.4	40-140			
1,2-Diphenylhydrazine/Azobenzene	1.24	0.34	mg/Kg wet	1.67		74.1	40-140			
oranthene	1.25	0.17	mg/Kg wet	1.67		75.0	40-140			
luorene	1.20	0.17	mg/Kg wet	1.67		71.8	40-140			
Hexachlorobenzene	1.25	0.34	mg/Kg wet	1.67		75.1	40-140			
Hexachlorobutadiene	0.990	0.34	mg/Kg wet	1.67		59.4	40-140			
Hexachlorocyclopentadiene	0.692	0.34	mg/Kg wet	1.67		41.5	40-140			V-05
Hexachloroethane	1.01	0.34	mg/Kg wet	1.67		60.7	40-140			
Indeno(1,2,3-cd)pyrene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140			
Isophorone	1.16	0.34	mg/Kg wet	1.67		69.8	40-140			
1-Methylnaphthalene	1.01	0.17	mg/Kg wet	1.67		60.5	40-140			
2-Methylnaphthalene	1.21	0.17	mg/Kg wet	1.67		72.5	40-140			
2-Methylphenol	1.08	0.34	mg/Kg wet	1.67		64.9	30-130			
3/4-Methylphenol	1.15	0.34	mg/Kg wet	1.67		69.1	30-130			
Naphthalene	1.09	0.17	mg/Kg wet	1.67		65.3	40-140			
2-Nitroaniline	1.30	0.34	mg/Kg wet	1.67		77.8	40-140			
3-Nitroaniline	1.21	0.34	mg/Kg wet	1.67		72.7	30-140			†
4-Nitroaniline	1.33	0.34	mg/Kg wet	1.67		79.6	40-140			
Nitrobenzene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140			
2-Nitrophenol	1.26	0.34	mg/Kg wet	1.67		75.9	30-130			
4-Nitrophenol	1.39	0.66	mg/Kg wet	1.67		83.4	30-130			
N-Nitrosodimethylamine	0.944	0.34	mg/Kg wet	1.67		56.7	40-140			
N-Nitrosodiphenylamine/Diphenylamine	1.27	0.34	mg/Kg wet	1.67		76.2	40-140			
N-Nitrosodi-n-propylamine	1.11	0.34	mg/Kg wet	1.67		66.8	40-140			
Pentachloronitrobenzene	1.29	0.34	mg/Kg wet	1.67		77.2	40-140			
Pentachlorophenol	0.791	0.34	mg/Kg wet	1.67		47.4	30-130			V-05
Phenanthrene	1.24	0.17	mg/Kg wet	1.67		74.4	40-140			
Phenol	1.22	0.34	mg/Kg wet	1.67		73.1	30-130			
Pyrene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140			
Pyridine	0.632	0.34	mg/Kg wet	1.67		37.9	30-140			†
2,4,5-Tetrachlorobenzene	1.04	0.34	mg/Kg wet	1.67		62.5	40-140			
2,4-Trichlorobenzene	1.03	0.34	mg/Kg wet	1.67		61.9	40-140			
2,4,5-Trichlorophenol	1.26	0.34	mg/Kg wet	1.67		75.6	30-130			
2,4,6-Trichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.3	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
LCS (B246869-BS1) Prepared: 11/24/19 Analyzed: 11/27/19										
Surrogate: 2-Fluorophenol	4.87		mg/Kg wet	6.67		73.1	30-130			
Surrogate: Phenol-d6	5.00		mg/Kg wet	6.67		75.1	30-130			
Surrogate: Nitrobenzene-d5	2.33		mg/Kg wet	3.33		69.9	30-130			
Surrogate: 2-Fluorobiphenyl	2.47		mg/Kg wet	3.33		74.0	30-130			
Surrogate: 2,4,6-Tribromophenol	6.16		mg/Kg wet	6.67		92.4	30-130			
Surrogate: p-Terphenyl-d14	2.80		mg/Kg wet	3.33		83.9	30-130			
LCS Dup (B246869-BS1) Prepared: 11/24/19 Analyzed: 11/27/19										
Acenaphthene	1.14	0.17	mg/Kg wet	1.67		68.5	40-140	4.26	30	
Acenaphthylene	1.19	0.17	mg/Kg wet	1.67		71.6	40-140	2.26	30	
Acetophenone	1.22	0.34	mg/Kg wet	1.67		73.4	40-140	9.71	30	
Aniline	0.956	0.34	mg/Kg wet	1.67		57.4	10-140	16.7	50	† ‡
Anthracene	1.29	0.17	mg/Kg wet	1.67		77.3	40-140	2.97	30	
Benzidine	1.92	0.66	mg/Kg wet	1.67		115	40-140	4.03	30	V-04, V-05, V-35
Benzo(a)anthracene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140	2.87	30	
Benzo(a)pyrene	1.21	0.17	mg/Kg wet	1.67		72.6	40-140	3.33	30	
Benzo(b)fluoranthene	1.29	0.17	mg/Kg wet	1.67		77.4	40-140	8.54	30	
Benzo(g,h,i)perylene	1.33	0.17	mg/Kg wet	1.67		79.8	40-140	14.7	30	
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.67		78.1	40-140	7.69	30	
Benzoic Acid	0.168	1.0	mg/Kg wet	1.67		10.1	* 30-130	6.35	50	L-04 ‡
s(2-chloroethoxy)methane	1.20	0.34	mg/Kg wet	1.67		72.3	40-140	8.27	30	
Bis(2-chloroethyl)ether	1.16	0.34	mg/Kg wet	1.67		69.7	40-140	11.2	30	
Bis(2-chloroisopropyl)ether	1.26	0.34	mg/Kg wet	1.67		75.4	40-140	10.9	30	
Bis(2-Ethylhexyl)phthalate	1.25	0.34	mg/Kg wet	1.67		75.2	40-140	1.34	30	
4-Bromophenylphenylether	1.26	0.34	mg/Kg wet	1.67		75.7	40-140	7.37	30	
Butylbenzylphthalate	1.26	0.34	mg/Kg wet	1.67		75.8	40-140	2.86	30	
Carbazole	1.22	0.17	mg/Kg wet	1.67		73.4	40-140	1.59	30	
4-Chloroaniline	0.976	0.66	mg/Kg wet	1.67		58.5	10-140	8.81	30	V-34 †
4-Chloro-3-methylphenol	1.17	0.66	mg/Kg wet	1.67		70.1	30-130	5.01	30	
2-Chloronaphthalene	1.07	0.34	mg/Kg wet	1.67		64.0	40-140	7.79	30	
2-Chlorophenol	1.23	0.34	mg/Kg wet	1.67		73.6	30-130	10.3	30	
4-Chlorophenylphenylether	1.16	0.34	mg/Kg wet	1.67		69.5	40-140	0.0576	30	
Chrysene	1.21	0.17	mg/Kg wet	1.67		72.7	40-140	2.08	30	
Dibenz(a,h)anthracene	1.24	0.17	mg/Kg wet	1.67		74.6	40-140	8.55	30	
Dibenzofuran	1.21	0.34	mg/Kg wet	1.67		72.3	40-140	0.777	30	
Di-n-butylphthalate	1.26	0.34	mg/Kg wet	1.67		75.8	40-140	2.13	30	
1,2-Dichlorobenzene	1.14	0.34	mg/Kg wet	1.67		68.3	40-140	11.1	30	
1,3-Dichlorobenzene	1.10	0.34	mg/Kg wet	1.67		66.0	40-140	10.4	30	
1,4-Dichlorobenzene	1.11	0.34	mg/Kg wet	1.67		66.5	40-140	10.8	30	
3,3-Dichlorobenzidine	1.07	0.17	mg/Kg wet	1.67		64.1	20-140	12.1	50	† ‡
2,4-Dichlorophenol	1.17	0.34	mg/Kg wet	1.67		70.3	30-130	3.92	30	
Diethylphthalate	1.15	0.34	mg/Kg wet	1.67		68.8	40-140	1.36	30	
2,4-Dimethylphenol	1.07	0.34	mg/Kg wet	1.67		63.9	30-130	4.94	30	
Dimethylphthalate	1.19	0.34	mg/Kg wet	1.67		71.4	40-140	2.47	30	
4,6-Dinitro-2-methylphenol	1.09	0.34	mg/Kg wet	1.67		65.5	30-130	0.0916	30	
2,4-Dinitrophenol	0.557	0.66	mg/Kg wet	1.67		33.4	30-130	7.71	30	
2,4-Dinitrotoluene	1.25	0.34	mg/Kg wet	1.67		74.8	40-140	4.34	30	
2,6-Dinitrotoluene	1.33	0.34	mg/Kg wet	1.67		79.9	40-140	0.653	30	
Di-n-octylphthalate	1.54	0.34	mg/Kg wet	1.67		92.4	40-140	17.6	30	
1,2-Diphenylhydrazine/Azobenzene	1.35	0.34	mg/Kg wet	1.67		80.8	40-140	8.63	30	
Fluoranthene	1.27	0.17	mg/Kg wet	1.67		76.4	40-140	1.85	30	
Fluorene	1.17	0.17	mg/Kg wet	1.67		70.4	40-140	1.91	30	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B246869 - SW-846 3546										
LCS Dup (B246869-BSD1)					Prepared: 11/24/19 Analyzed: 11/27/19					
Hexachlorobenzene	1.31	0.34	mg/Kg wet	1.67		78.9	40-140	4.86	30	
Hexachlorobutadiene	1.13	0.34	mg/Kg wet	1.67		67.6	40-140	12.9	30	
Hexachlorocyclopentadiene	0.678	0.34	mg/Kg wet	1.67		40.7	40-140	1.99	30	V-05
Hexachloroethane	1.11	0.34	mg/Kg wet	1.67		66.4	40-140	8.96	30	
Indeno(1,2,3-cd)pyrene	1.37	0.17	mg/Kg wet	1.67		82.0	40-140	9.48	30	
Isophorone	1.24	0.34	mg/Kg wet	1.67		74.7	40-140	6.67	30	
1-Methylnaphthalene	1.05	0.17	mg/Kg wet	1.67		63.0	40-140	4.05	30	
2-Methylnaphthalene	1.27	0.17	mg/Kg wet	1.67		76.0	40-140	4.69	30	
2-Methylphenol	1.17	0.34	mg/Kg wet	1.67		70.1	30-130	7.79	30	
3/4-Methylphenol	1.21	0.34	mg/Kg wet	1.67		72.4	30-130	4.66	30	
Naphthalene	1.19	0.17	mg/Kg wet	1.67		71.4	40-140	8.92	30	
2-Nitroaniline	1.28	0.34	mg/Kg wet	1.67		76.7	40-140	1.50	30	
3-Nitroaniline	1.20	0.34	mg/Kg wet	1.67		72.3	30-140	0.607	30	†
4-Nitroaniline	1.23	0.34	mg/Kg wet	1.67		74.1	40-140	7.19	30	
Nitrobenzene	1.24	0.34	mg/Kg wet	1.67		74.1	40-140	9.29	30	
2-Nitrophenol	1.39	0.34	mg/Kg wet	1.67		83.7	30-130	9.75	30	
4-Nitrophenol	1.26	0.66	mg/Kg wet	1.67		75.8	30-130	9.53	50	‡
N-Nitrosodimethylamine	1.04	0.34	mg/Kg wet	1.67		62.4	40-140	9.71	30	
N-Nitrosodiphenylamine/Diphenylamine	1.36	0.34	mg/Kg wet	1.67		81.4	40-140	6.58	30	
N-Nitrosodi-n-propylamine	1.21	0.34	mg/Kg wet	1.67		72.5	40-140	8.15	30	
o-chloronitrobenzene	1.30	0.34	mg/Kg wet	1.67		78.1	40-140	1.16	30	
p-chlorophenol	0.770	0.34	mg/Kg wet	1.67		46.2	30-130	2.65	30	V-05
Phenanthrene	1.27	0.17	mg/Kg wet	1.67		76.2	40-140	2.39	30	
Phenol	1.32	0.34	mg/Kg wet	1.67		79.1	30-130	7.99	30	
Pyrene	1.25	0.17	mg/Kg wet	1.67		75.2	40-140	3.41	30	
Pyridine	0.687	0.34	mg/Kg wet	1.67		41.2	30-140	8.34	30	†
1,2,4,5-Tetrachlorobenzene	1.20	0.34	mg/Kg wet	1.67		72.2	40-140	14.3	30	
1,2,4-Trichlorobenzene	1.16	0.34	mg/Kg wet	1.67		69.6	40-140	11.8	30	
2,4,5-Trichlorophenol	1.29	0.34	mg/Kg wet	1.67		77.3	30-130	2.12	30	
2,4,6-Trichlorophenol	1.24	0.34	mg/Kg wet	1.67		74.2	30-130	5.43	30	
Surrogate: 2-Fluorophenol	5.38		mg/Kg wet	6.67		80.7	30-130			
Surrogate: Phenol-d6	5.28		mg/Kg wet	6.67		79.3	30-130			
Surrogate: Nitrobenzene-d5	5.52		mg/Kg wet	3.33		75.7	30-130			
Surrogate: 2-Fluorobiphenyl	2.68		mg/Kg wet	3.33		80.6	30-130			
Surrogate: 2,4,6-Tribromophenol	5.69		mg/Kg wet	6.67		85.4	30-130			
Surrogate: p-Terphenyl-d14	2.84		mg/Kg wet	3.33		85.1	30-130			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B247114 - SW-846 7471										
Blank (B247114-BLK1)										
					Prepared: 11/26/19 Analyzed: 11/27/19					
Mercury	ND	0.025	mg/Kg wet							
LCS (B247114-BS1)										
					Prepared: 11/26/19 Analyzed: 11/27/19					
Mercury	2.73	0.38	mg/Kg wet	2.93		93.1	71.3-128.7			
LCS Dup (B247114-BSD1)										
					Prepared: 11/26/19 Analyzed: 11/27/19					
Mercury	2.23	0.38	mg/Kg wet	2.93		76.0	71.3-128.7	20.2	*	20 R-05
Batch B247118 - SW-846 3050B										
Blank (B247118-BLK1)										
					Prepared: 11/26/19 Analyzed: 11/27/19					
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	1.7	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.17	mg/Kg wet							
Chromium	ND	0.33	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Nickel	ND	0.33	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.67	mg/Kg wet							
Zinc	ND	0.67	mg/Kg wet							
LCS (B247118-BS1)										
					Prepared: 11/26/19 Analyzed: 11/27/19					
Antimony	29.7	5.0	mg/Kg wet	40.0		74.2	6.3-208			
Arsenic	108	5.0	mg/Kg wet	125		86.5	82.4-116.8			
Barium	539	5.0	mg/Kg wet	529		102	81.7-118.5			
Beryllium	147	0.50	mg/Kg wet	155		94.8	82.6-116.8			
Cadmium	37.6	0.50	mg/Kg wet	37.7		99.7	82.2-117.5			
Chromium	51.4	0.99	mg/Kg wet	58.3		88.1	82-118.2			
Lead	94.9	1.5	mg/Kg wet	111		85.5	82.3-117.1			
Nickel	311	0.99	mg/Kg wet	333		93.5	82.6-117.4			
Selenium	226	9.9	mg/Kg wet	251		89.9	78.9-121.5			
Silver	26.5	0.99	mg/Kg wet	27.2		97.6	81-119.2			
Thallium	221	5.0	mg/Kg wet	241		91.5	80.5-119.1			
Vanadium	108	2.0	mg/Kg wet	125		86.7	78.6-120.8			
Zinc	325	2.0	mg/Kg wet	351		92.5	80.3-119.4			
LCS Dup (B247118-BSD1)										
					Prepared: 11/26/19 Analyzed: 11/27/19					
Antimony	29.6	4.9	mg/Kg wet	40.0		73.9	6.3-208	0.448	30	
Arsenic	109	4.9	mg/Kg wet	125		86.8	82.4-116.8	0.361	30	
Barium	583	4.9	mg/Kg wet	529		110	81.7-118.5	7.84	20	
Beryllium	145	0.49	mg/Kg wet	155		93.4	82.6-116.8	1.50	30	
Cadmium	35.9	0.49	mg/Kg wet	37.7		95.2	82.2-117.5	4.66	20	
Chromium	51.9	0.98	mg/Kg wet	58.3		89.0	82-118.2	0.978	30	
Lead	96.4	1.5	mg/Kg wet	111		86.9	82.3-117.1	1.59	30	
Nickel	316	0.98	mg/Kg wet	333		94.9	82.6-117.4	1.52	30	
Selenium	225	9.8	mg/Kg wet	251		89.6	78.9-121.5	0.276	30	
Silver	27.1	0.98	mg/Kg wet	27.2		99.7	81-119.2	2.19	30	
Thallium	220	4.9	mg/Kg wet	241		91.2	80.5-119.1	0.306	30	
Vanadium	109	2.0	mg/Kg wet	125		87.0	78.6-120.8	0.292	30	
Zinc	321	2.0	mg/Kg wet	351		91.5	80.3-119.4	1.12	30	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B247118 - SW-846 3050B

Duplicate (B247118-DUP1)		Source: 19K1404-01			Prepared: 11/26/19 Analyzed: 11/27/19					
Antimony	ND	3.0	mg/Kg dry		ND		NC	35		
Arsenic	5.95	3.0	mg/Kg dry		8.14		31.0	35		
Barium	63.2	3.0	mg/Kg dry		63.7		0.781	35		
Beryllium	0.483	0.30	mg/Kg dry		0.493		2.13	35		
Cadmium	0.314	0.30	mg/Kg dry		ND		NC	35		
Chromium	14.5	0.60	mg/Kg dry		13.8		4.91	35		
Lead	90.7	0.90	mg/Kg dry		86.6		4.71	35		
Nickel	10.5	0.60	mg/Kg dry		9.84		6.58	35		
Selenium	ND	6.0	mg/Kg dry		ND		NC	35		
Silver	ND	0.60	mg/Kg dry		ND		NC	35		
Thallium	ND	3.0	mg/Kg dry		ND		NC	35		
Vanadium	34.6	1.2	mg/Kg dry		37.0		6.79	35		
Zinc	68.6	1.2	mg/Kg dry		69.7		1.48	35		

MRL Check (B247118-MRL1)

Prepared: 11/26/19 Analyzed: 11/27/19

Lead	0.520	0.50	mg/Kg wet	0.500	104	80-120				
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Matrix Spike (B247118-MS1)

Source: 19K1404-01

Prepared: 11/26/19 Analyzed: 11/27/19

Antimony	10.6	2.9	mg/Kg dry	28.9	1.61	31.1	*	75-125		MS-07
Arsenic	30.8	2.9	mg/Kg dry	28.9	8.14	78.3		75-125		
Barium	94.7	2.9	mg/Kg dry	28.9	63.7	108		75-125		
Beryllium	27.3	0.29	mg/Kg dry	28.9	0.493	92.8		75-125		
Cadmium	25.9	0.29	mg/Kg dry	28.9	0.295	88.7		75-125		
Chromium	42.0	0.58	mg/Kg dry	28.9	13.8	97.8		75-125		
Lead	117	0.87	mg/Kg dry	28.9	86.6	107		75-125		
Nickel	36.7	0.58	mg/Kg dry	28.9	9.84	93.1		75-125		
Selenium	25.1	5.8	mg/Kg dry	28.9	ND	86.9		75-125		
Silver	29.2	0.58	mg/Kg dry	28.9	ND	101		75-125		
Thallium	31.3	2.9	mg/Kg dry	28.9	ND	108		75-125		
Vanadium	62.9	1.2	mg/Kg dry	28.9	37.0	89.6		75-125		
Zinc	126	1.2	mg/Kg dry	57.8	69.7	97.4		75-125		

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
MS-07	Matrix spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result or non-homogeneous sample aliquot cannot be eliminated.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-35	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side for this compound. Reported result is estimated.

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 6010D in Soil</i>	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,AIHA,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
<i>SW-846 7471B in Soil</i>	
Mercury	CT,NH,NY,NC,ME,VA
<i>SW-846 8270D-E in Soil</i>	
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Aniline	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzidine	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Benzoic Acid	NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA

CERTIFICATIONS

ertified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D-E in Soil</i>	
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
1,2-Diphenylhydrazine/Azobenzene	NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
1-Methylnaphthalene	NC
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodimethylamine	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachloronitrobenzene	NY,NC
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
Pyridine	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2022
MA	Massachusetts DEP	M-MA100	06/30/2020
CT	Connecticut Department of Public Health	PH-0567	09/30/2021
NY	New York State Department of Health	10899 NELAP	04/1/2020
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2020
RI	Rhode Island Department of Health	LAO00112	12/30/2019
NC	North Carolina Div. of Water Quality	652	12/31/2019
NJ	New Jersey DEP	MA007 NELAP	06/30/2020
FL	Florida Department of Health	E871027 NELAP	06/30/2020
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2020
ME	State of Maine	2011028	06/9/2021
VA	Commonwealth of Virginia	460217	12/14/2019
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2020
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2020
NC-DW	North Carolina Department of Health	25703	07/31/2020
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2020

19K1404



Phone: 413-525-2332
Fax: 413-525-6405

Email: info@contestlabs.com

Company Name: **CONTEST CONSULTANTS INC**
Address: **6 HURON DRIVE NATICK MA**
Phone: **508 875 2657**
Project Name: **UMASS WALTHAM**
Project Location: **BEAVER ST WALTHAM MA**
Project Number: **18301P**
Project Manager: **ALAN SUNOQUIST**
Con-Test Quote Name/Number:

Doc # 381 Rev 2_06262019

39 Spruce Street
East Longmeadow, MA 01028

CHAIN OF CUSTODY RECORD

Requested Turnaround Time: ☒ 5-Day ☐ 10-Day ☐ Due Date: ☐ Rush-Approval Required ☐ 3-Day ☐ 4-Day

Disolved Metals Samples: ☐ Field Filtered ☐ Lab to Filter

Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

Data Delivery: ☒ PDF ☐ EXCEL

Format: ☐ Other: ☐ Both

CLP Like Data Pkg Required: ☐

Email To: **ASUNOQUIST@CONCONSULTANTS.COM**

Fax To #: **MOBRIENC@CONCONSULTANTS.COM**

ANALYSIS REQUESTED

Con-Test Work Order #	Client Sample ID / Description	Request Date	Con-Test Date	Matrix	Container	Vials	Glass	Plastic	Bacteria	Encore
01	HB-16	11-20-19	1400	COMP	S	U				
02	HB-17	11-20-19	1500							
03	HB-19	11-21-19	0830							
04	HB-20		0900							
05	HB-22		1030							
06	HB-23		1130							
07	HB-24		1230							
08	HB-25		1300							
09	HB-26		1330							
10	HB-27		1430							

Client Comments:

Relinquished by: (signature)	Date/Time: 11-20-19
Received by: (signature)	Date/Time: 10:55
Relinquished by: (signature)	Date/Time: 11-21-19
Received by: (signature)	Date/Time: 4:00
Relinquished by: (signature)	Date/Time: 10:00
Received by: (signature)	Date/Time: 11-22-19
Relinquished by: (signature)	Date/Time: 11-22-19
Received by: (signature)	Date/Time: 11-22-19
Relinquished by: (signature)	Date/Time: 11-22-19
Received by: (signature)	Date/Time: 11-22-19

Special Requirements

MA MCP Required	<input type="checkbox"/>
MCP Certification Form Required	<input type="checkbox"/>
CT RCP Required	<input type="checkbox"/>
RCP Certification Form Required	<input type="checkbox"/>
MA State DW Required	<input type="checkbox"/>
PWSID #	
Project Entity	
Government	<input type="checkbox"/>
Federal	<input type="checkbox"/>
City	<input type="checkbox"/>
Municipality	<input type="checkbox"/>
21 J	<input type="checkbox"/>
Brownfield	<input type="checkbox"/>
MWRA	<input type="checkbox"/>
School	<input type="checkbox"/>
MBTA	<input type="checkbox"/>
WRTA	<input type="checkbox"/>
Chromatogram	<input type="checkbox"/>
AIHA-LAP, LLC	<input type="checkbox"/>
Other	

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

Preservation Code: ☐ Courier Use Only
Total Number Of: ☐ VIALS ☐ GLASS ☐ PLASTIC ☐ BACTERIA ☐ ENCORE
Glassware in the fridge? Y/N
Glassware in freezer? Y/N
Prepackaged Cooler? Y/N
Contest is not responsible for missing samples from prepacked coolers

Comments:

Disclaimer: Con-Test Labs is not responsible for any omitted information on the Chain of Custody. The Chain of Custody is a legal document that must be complete and accurate and is used to determine who analyses the laboratory will perform. Any missing information is not the laboratory's responsibility. Con-Test values your partnership on each project and will try to assist with missing information, but will not be held accountable.

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples _____



con-test®
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False
Statement will be brought to the attention of the Client - State True or False

Client CDW Consultants

Received By SA Date 11/22 Time 11000

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct from Sampling _____ Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 2.1
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? NA Were Samples Tampered with? NA

Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T

Did COC include all pertinent Information? Client T Analysis T Sampler Name T

Project T ID's T Collection Dates/Times T

Are Sample labels filled out and legible? T

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T

Is there Headspace where applicable? NA

Proper Media/Containers Used? SA T MS/MSD? F

Were trip blanks received? F Is splitting samples required? F

Do all samples have the proper pH? _____ On COC? F Acid NA Base NA

Unp-	1 Liter Amb.	1 Liter Plastic	16 oz Amb.	10
HCL-	500 mL Amb.	500 mL Plastic	8oz Amb/Clear	
Meoh-	250 mL Amb.	250 mL Plastic	4oz Amb/Clear	
Bisulfate-	Flashpoint	Col./Bacteria	2oz Amb/Clear	
DI-	Other Glass	Other Plastic	Encore	
Thiosulfate-	SOC Kit	Plastic Bag	Frozen:	
Sulfuric-	Perchlorate	Ziplock		

Unused Media

Unp-	1 Liter Amb.	1 Liter Plastic	16 oz Amb.	
HCL-	500 mL Amb.	500 mL Plastic	8oz Amb/Clear	
Meoh-	250 mL Amb.	250 mL Plastic	4oz Amb/Clear	
Bisulfate-	Col./Bacteria	Flashpoint	2oz Amb/Clear	
DI-	Other Plastic	Other Glass	Encore	
Thiosulfate-	SOC Kit	Plastic Bag	Frozen:	
Sulfuric-	Perchlorate	Ziplock		

Comments:

